

OPERATING GUIDE AND WARRANTY

LOOK INSIDE...
YOUR ZENITH
TV COULD BE
FREE!

ZENITH ELECTRONICS CORPORATION
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GLENVIEW, ILLINOIS 60025

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ZENITH
CUSTOMSERIES
COLOR TV
THE QUALITY GOES IN
BEFORE THE NAME GOES ON

WELCOME

Welcome to the large family of Zenith Color Television owners.

This guide provides instructions on how to operate your new TV. It is supplemented by a booklet on how to properly connect your TV antenna and a folder containing

 Safety Tips. We urge you to read these publications carefully so that you will receive full enjoyment from your new Zenith TV for many years to come.

Your new Zenith has been designed and built to give you the very best in quality, features and performance. There are approximately 75 regional Zenith distributors and more than 10,000 distributor-approved Zenith service centers throughout the U.S. and Canada who can attend promptly and effectively to ordinary service needs.

If you should have an unusual performance or service problem that cannot be satisfactorily resolved by your distributor-approved Zenith service center, contact

the regional Zenith distributor in your area, or write to:

Zenith Electronics Corporation
Customer Service Department
11000 Seymour Avenue
Franklin Park, Illinois 60131.

Send the model number, serial number, and date of purchase or original installation, with a full explanation of the problem and the service history. We will welcome the opportunity to look into your specific question or problem and to be of assistance in resolving it promptly.

The model and serial numbers of your new TV are located on the back of the TV cabinet. For your future convenience and protection, we suggest that you record these numbers here:

Model No. _____

Serial No. _____

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WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute the risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE.

NOTE TO CATV SYSTEM INSTALLER:

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

BEFORE YOU OPERATE YOUR NEW TV...

...there are several things you should know about:

Location — Place your TV where sunlight or bright light will not fall on the screen and affect picture visibility. A comfortable viewing distance is usually six feet or more.

Ventilation — Proper ventilation keeps your TV running cool. Air circulates through perforations or slots in the back and bottom of the cabinet. *Do not block these vents or you will shorten the life of your TV.*

Power Source — Your TV is designed to operate on normal household current, 120 volt 60 Hertz AC. *Do not attempt to operate it on DC current.*

Power Cord — Your power cord has a polarized plug as required by Underwriters Laboratories. It has one regular blade and one wide blade and fits only one way into a standard electrical outlet. If the blades will not enter either way, your outlet is very old and non-standard. A new outlet should be installed by a qualified electrician.

Safe Operation — Your TV is manufactured and tested with your safety in mind. However, unusual stress caused by dropping or mishandling, exposure to flood, fire, rain or moisture, or accidental spilling of liquids into the TV, can result in potential electrical shock or fire hazards. If this happens, have your TV checked by a qualified service technician before using it again. Please read and observe each safety point in the "Safety Tips" folder when installing and using your TV.

FIXED PATTERN DISPLAY CAUTION:

If you use your TV for video games, computers, teletext or other fixed displays, avoid setting the PICTURE control for an excessively bright picture. A bright, fixed pattern, if used for long periods of time, can result in permanent imprint on the TV picture tube. You can reduce this possibility by alternating the use of the fixed pattern display with normal TV viewing by turning the picture control down for sustained fixed pattern use and by turning off the fixed pattern display when not in use.

Look for the Owner Registration Card on your new Zenith TV set. You could win a full refund on your TV.

Each month a drawing will be held by Zenith from the completed Owner's Registration cards received during the preceding month. Zenith will reimburse the winner for the full purchase price of the Color TV receiver. In order to participate simply complete and return the owner's regis-

tration card at once, even if you choose not to complete the information and interests portion of the questionnaire. Rental TV not eligible. See Owner Registration Card for full details.

*Offer void in Canada and other countries where restricted or prohibited by law.

THE FIRST TIME YOU OPERATE YOUR TV...

...The VHF and UHF antenna (or Cable TV cable) should be connected to your TV. See the antenna instructions in your TV antenna Connection Guide.

1. Plug in your TV.
2. Turn the TV on by pressing the OFF/ON button on the TV control panel. The channel number will be visible in the display window.
3. Adjust volume by pressing the VOL(VOLUME)/UP/DOWN button to the desired sound level. When the TV is turned OFF, it will "remember" the last volume level and return to that level the next time it is turned ON.
4. Check the position of the electronic Band Selector switch. To do so, momentarily press the Band Selector button on the TV control panel. Observe the display window. It should change from a channel number display to a small letter **b** or **c** or **h** or the capital letter **F**.



b(b'cast)

Typical Band Selection indicator in display window.

The display should be set to indicate:

- b** (b'cast) — for receiving standard over-the-air broadcasts.
- c** (cable) — for connection to conventional Cable TV.
- h** (hrc) — for Cable TV systems that operate on HRC.
- F** (icc) — for Cable TV systems that operate on ICC.

If the indicated position of the electronic Band Selector switch is not correct for the

kind of TV programming you want to watch, change the position as follows:

With the channel number visible in the display window, press the Band Selector button once. Now, while the Band Selector letter is still visible in the display window, press the button again and observe the letter change in the display window. Each time you press the button the display will change to the next letter. Stop pressing the button when the desired indicator letter appears.

After about 5 seconds, the display window will once again display the regular channel number. You have now set the electronic Band Selector to match your viewing requirements.

PLEASE NOTE: YOU MUST SET THE ELECTRONIC BAND SELECTOR TO MEET YOUR VIEWING REQUIREMENTS OR YOU MAY NOT RECEIVE A TELEVISION PICTURE.

Operation of the Band Selector is also described in the paragraphs entitled, "Choosing the Right Band Selector and AFC Switch Settings." See page 6.

5. AFC (AUTOMATIC FREQUENCY CONTROL) SETTING. Your TV has an electronic AFC with two settings: FIXED and SEARCH. These settings are shown in the display window on command as one of two capital letters, either "F" for FIXED mode, or "S" for SEARCH mode.

Typical AFC indicator in display window.



F(FIXED)

To check the present setting, press the AFC button once, observing the display window. The correct setting depends upon the type of TV signal you are receiving. The settings recommended are:

- F** (FIXED) — when receiving standard, over-the-air TV broadcasts.
- F** (FIXED) or **S** (SEARCH) — if connected to a Cable TV (CATV) — with or without HRC or ICC.
- S** (SEARCH) — for video games.

The procedure for changing AFC Selection settings is similar to that for changing Band Selector settings, except press the AFC button instead of the Band Selector button.

Operation of the AFC switch is also described in the paragraphs entitled,

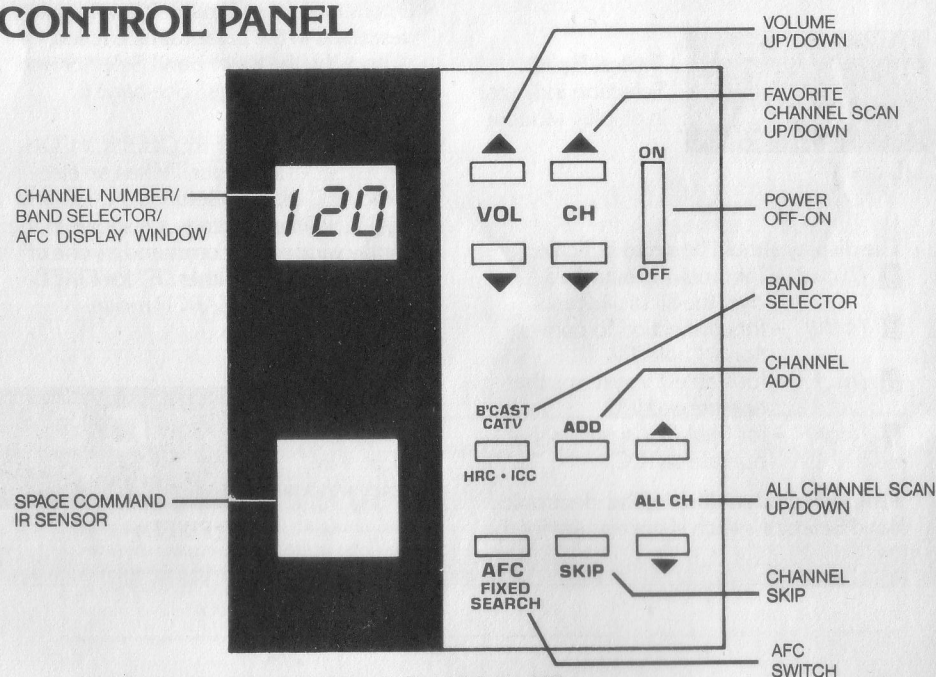
“AFC Switch Operation” and “Choosing The Right Band Selector and AFC Switch Settings.” See pages 9 and 10.

6. Channel Selection. Press the CH(ANNEL) UP or DOWN buttons to select the desired channel. The channel number will appear in the display window.

PLEASE NOTE

THIS SEQUENCE OF UP/DOWN CHANNELS IS PROGRAMMABLE BY YOU. THE EXISTING SEQUENCE WAS PROGRAMMED AT THE FACTORY AND MAY INCLUDE EMPTY CHANNELS OR EXCLUDE CHANNELS AVAILABLE IN YOUR AREA. IF A DESIRED CHANNEL IS NOT IN THE SEQUENCE, YOU SHOULD PROGRAM IT NOW BY FOLLOWING THE PROCEDURE IN THE FOLLOWING PARAGRAPHS ON “PROGRAMMING FAVORITE CHANNELS.”

CONTROL PANEL



Note: To prevent accidental activation, the Band Selector, AFC, ADD, SKIP and ALL CHANNEL UP/DOWN buttons protrude less than the other control panel buttons.

PROGRAMMING FAVORITE CHANNELS

Adding New Channels.

Press or hold down the ALL CH(ANNEL) UP or DOWN selector button to scan channels until the number of the channel you want to add appears in the display window. Then press the ADD button. That channel will now be included in the proper numerical sequence when you press the CH(ANNEL) UP/DOWN buttons. Repeat for each additional channel you wish to program.

Alternately, you may tune to the channel you want to add by using your remote control, then pressing the ADD button on the TV.

If a channel has been programmed and you wish to eliminate it from the UP/DOWN scan, you may do so by following the “Skipping Channels” procedure in the next paragraph.

Skipping Channels.

Select the channel you wish to skip. Then press the SKIP button. The letters “PO” (Program Out) will appear briefly in the display window. Repeat for each additional channel you want to skip.

The programmed Favorite channels will not be erased if the TV has been unplugged, or there has been a power interruption. Whenever you turn the TV off and then back on again, it will return to the last channel viewed. If the TV is unplugged and then turned on, or if there has been a power interruption, it will return to the lowest programmed channel number.

REMOTE CONTROL OPERATION

To operate your TV by remote control (see accompanying remote control illustration):

1. Turn on TV. To do so, point the remote control transmitter towards the TV. Press the OFF/ON button to turn the TV on.
2. Adjust volume by pressing the VOLUME UP/DOWN buttons. When the TV is off, it will “remember” the last volume level and return to that level the next time the TV is turned on.
3. To mute the sound at any time: Press the MUTE button and it will turn off the sound instantly; press again to turn sound back on.
4. Channel Selection. To select the channel you want to watch:

Press the numbered buttons, then press the ENTER button. For example, to get channel 5, press the 5 button, then the ENTER

button; to get channel 26, press 2, then 6, then ENTER. The channel number you selected will appear in the display window.

Your TV has a Timed Entry feature and it is not essential to press the ENTER button. If the ENTER button is not pressed, the TV will hesitate about 2 seconds and then change to the channel you selected by pressing only the numbered buttons.

Note: Whenever you select a two or three digit number, press the second digit within two seconds or the microprocessor will assume that two single channels have been selected and the TV will display the latest.

You can also select any channel programmed into the favorite channel scan by pressing the CHANNEL UP/DOWN buttons.

REMOTE CONTROL OPERATION OF YOUR TV

COMPUTER SPACE COMMAND® 3300

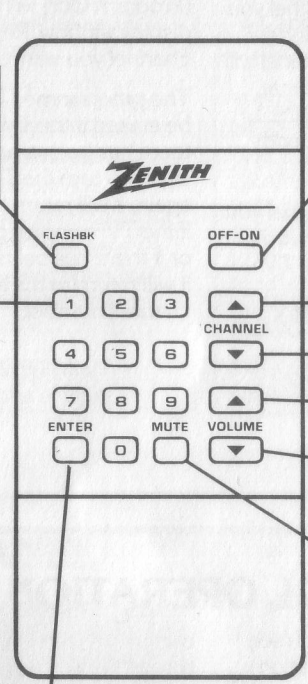


For optimum performance, point the transmitter toward the TV set when used.

Press to switch back and forth between the last two channels you were watching. (For details, see the "FLASHBACK FEATURE" section)

CHANNEL SELECTION:
The QUICK way: Press the digit button(s) corresponding to the channel number and then press the ENTER button. Example: to get channel 32, press 3 then 2 then ENTER. The EASY way: Press the digit button(s) only. The TV will automatically switch to the selected channel in about two seconds. In both cases, the channel number will appear in the display window. NOTE: When selecting a two or three digit channel number, press the second or third digit within two seconds of the previous one. Otherwise, the TV will assume that only the last digit has been selected and will display that channel.

Press to enter a channel number



Press to turn TV set ON or OFF

CHANNEL SELECTION:
The CHANNEL SCAN way: Press the UP arrow (▲) to change to the next higher programmed channel. Press the DOWN arrow (▼) to change to the next lower programmed channel.

(NOTE: If some channels are still missing from the CHANNEL UP/DOWN scan sequence, see the section entitled "PROGRAMMING FAVORITE CHANNELS")

Press to make sound louder (▲)*

Press to make sound softer (▼)*

Press to turn the sound OFF instantly while the picture remains. Press again to turn sound back ON.

*These functions will continue to operate as long as the buttons are pressed down. For single channel or small volume adjustment, be sure to release the button immediately.

FLASHBACK FEATURE

The Flashback feature lets you switch back and forth between the last two channels you have selected with just one button. The TV "remembers" the previous channel you selected, and will change to it when you press the Flashback (FLASHBK-PAUSE) key on your remote control.

For example, if you were watching channel 5 and changed to channel 32, you can change back to channel 5 by simply pressing

the Flashback key (TV-VCR switch in TV position). Press the Flashback key again and the TV will return to channel 32. In this way you can alternately view the last two channels you have selected using only the Flashback key.

Note: The Flashback function will be cancelled if you change the current band or turn the TV off.

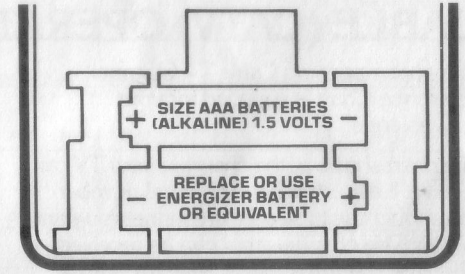
REMOTE CONTROL BATTERY REPLACEMENT

Your remote control comes with batteries installed. When replacement becomes necessary, be sure to use two high quality Energizer or equivalent "AAA" alkaline batteries.

To replace the batteries: Locate the battery compartment on the back of the remote control. To remove the compartment cover, insert your fingernail into slot at top of opening. PULL DOWN and OUT. Remove the old batteries and insert the new ones, making sure the polarity markings ("+" and "-") on the batteries match those in the compartment.

Replace the cover by inserting the two tabs on the bottom of the cover into the housing. Snap cover into position.

Be careful not to place any objects on top of the remote control buttons. Prolonged accidental use will result in shortened battery life.



THE ZENITH PCC MULTI-BRAND REMOTE CONTROL

If you have a remote control TV, a remote control VCR and a remote control Cable TV decoder, you can operate them all with one handy remote, even if they are all different brands! The Zenith PCC Multi-Brand Remote Control operates most brands and models of remote controlled TVs, VCRs and Cable TV decoders.

After a simple one-time set-up of switches, it is as easy to use as an ordinary remote control. The PCC features independent power ON/OFF keys for each component, single function buttons and much more.

You can purchase the PCC Multi-Brand Remote from your Zenith dealer.

TUNING SYSTEM

Your TV tuning system uses a micro-processor which provides for accurate channel selection. It has automatic fine-tuning so that manual fine-tuning is not necessary. Channels available to you in broadcast or CATV mode are:

b'cast mode **b** :

VHF 2-13

UHF 14-69*

Channel Display: 2 to 83

All channels other than 2-83 are invalid and the TV will ignore their selection.

*(In U.S., 14 to 83 with optional tuner modification)

For proper TV reception, you must adjust the electronic Band Selector and AFC switch for a particular viewing situation, as described on pages 3 and 4.

catv mode **a**, **b**, or **i** :

0, 00, 1-13

14 to 120**

Channel Display: 0, 00, 1 to 134

All channels above 134 are invalid and the TV will ignore their selection.

** (In U.S., 134 with optional tuner modification)

CABLE (CATV) OPERATION

The accompanying Cable TV Channel Reference Chart is supplied for your convenience.

The chart shows all the channels your TV can receive. It also shows the channel number you should use to select the channel you want to view. The channels that can be received when the electronic Band Selector is in **a**, **b**, or **i** position are:

VHF

Channel 2 to 13
including A-8 (4+)

Midband Channel A-2, A-1, 14 to 22

Superband Channel 23 to 36

Hyperband Channel 37 to 64

Ultraband Channel 65 to 120*

*134 with optional Tuner modification.

As shown on the chart, to get VHF channels 2 through 13, or Ultraband channels

65 to 120, select those channel numbers directly. To get the Midband, Superband or Hyperband channels, select the numbers shown under their respective alphabetical designations.

*Please note that if you select a channel on which there is no station broadcast in your area, the TV will change to that channel, but you will get a blank screen or "snow" on the screen. With the Band Selector in **a**, **b**, or **i** position, all channel numbers except those above 134 are valid.*

For convenience in using the chart, fill in the name and number of the actual station being provided by your company on each channel. Your Cable company can give you this information.

CABLE TV (CATV) CHANNEL REFERENCE CHART

Note: Some cable systems change the sequence of channels and they may differ from the listing here. If so, follow the listing supplied by your cable company.

(VHF) Channel	2	3	4	A-8 (4+)	5	6	7	8	9	10	11	12	13	
Select Channel Number	2	3	4	00	5	6	7	8	9	10	11	12	13	
Actual TV Station*														
(Midband) Channel	A-2	A-1	A	B	C	D	E	F	G	H	I			
Select Channel Number	0	1	14	15	16	17	18	19	20	21	22			
Actual TV Station*														
(Superband) Channel	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
Select Channel Number	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Actual TV Station*														
(Hyperband) Channel	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN
Select Channel Number	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Actual TV Station*														
	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	AAA	BBB
	51	52	53	54	55	56	57	58	59	60	61	62	63	64
(Ultraband) Channel	65	66	67	68	69	70	71	72	73	74	75	76	77	78
Select Channel Number	65	66	67	68	69	70	71	72	73	74	75	76	77	78
Actual TV Station*														
	79	80	81	82	83	84	85	86	87	88	89	90	91	92
	93	94	95	96	97	98	99	100	101	102	103	104	105	106
	107	108	109	110	111	112	113	114	115	116	117	118	119	120

*Write in the actual station name or channel information supplied by your cable TV company.

BAND SELECTION SETTINGS

Your TV has four Band Selection switch settings. These allow you to select either over-the-air Broadcast TV (*b'cast*), Cable TV (*catv*), or the Cable TV-related HRC (*Harmonically Related Carrier*) or ICC (*Incremental Coherent Carrier*) reception bands. The *hrc* and *icc* settings are used for the reception of special Cable TV channels with offset frequency that may be used by some Cable companies. The proper switch settings for Broadcast TV or Cable TV are discussed in the paragraphs entitled, "Choosing The Right band Selector and AFC Switch Settings." See page 10.

Please note that (during either manual or remote operation) when the Band Selector is in *b'cast* position, only VHF and UHF

channel numbers (2-83) are "valid," and may be selected. But, if you select a valid channel on which there is no channel broadcasting in your area, you will get a blank screen or "snow" on the screen. The TV will ignore any attempt to select an "invalid" channel number.

When the Band Selector is in *catv* **C** or *hrc* **H** or *icc* **I** position, all numbers including 0, 00, and 1 (except those above 134) are valid and may be selected. The TV will ignore any attempt to select an "invalid" channel number.

Always check the position of the Band Selector if you experience difficulty in tuning some channels.

AFC SWITCH OPERATION

Not all TV transmitters operate exactly on specified channel frequency.

Your TV is equipped with an AFC circuit to automatically compensate for these variations. Its action is twofold:

- it *seeks out* the exact broadcast signal and,
- once the signal has been found, it *locks onto* it and, if need be, follows it if it should drift.

Your TV has two "seek ranges," indicated by an **F** (FIXED) or **S** (SEARCH) letter in the channel window display.

- When in **F** mode, the seek range is very small. It should be used with over-the-air TV stations – which are required to maintain very accurate channel frequency. Most cable TV channels also operate in this mode.
- When in **S** mode, the "seek range" is large and the TV is then able to capture TV signals with a larger frequency error. But it may take longer (up to about one second).

CHOOSING THE RIGHT BAND SELECTOR AND AFC SWITCH SETTINGS

Your TV provides for the tuning in of television channels on any one of four frequency bands. Use the Band Selector switch to do so.

Four Band Selector switch settings – *b'cast*, *catv*, *hrc* and *icc* – are provided for selecting either over-the-air Broadcast TV, Cable TV, or the Cable TV-related HRC or ICC frequency reception bands. Selection of the correct switch setting is made as follows:

A) Over-The-Air Broadcast TV (Your Own Rooftop or "Rabbit Ear" Antenna). Use the *b'cast* **B** mode setting when tuning only those channels that are broadcast over the air and picked up by your own antenna. The AFC switch setting should be in "F" (FIXED) **F** mode to permit the Zenith electronic tuner to quickly tune in the exact assigned broadcast frequencies.

B) Over-The-Air Broadcast TV (Master Antenna Systems). Use the *b'cast* **B** mode setting also when your TV is connected to some MATV (Master Antenna) systems, frequently used in apartment buildings and condominiums. The AFC switch setting should be in "F" (FIXED) **F** mode to permit the Zenith electronic tuner to quickly tune in the exact assigned broadcast frequencies.

NOTE:

1. Often, MATV systems shift UHF channels to unused VHF channels. In doing so, the VHF channels are sometimes generated on frequencies differing from FCC-assigned broadcast VHF frequencies. The result can be a poorly tuned program or no picture or sound. When this happens, select the AFC "S" (SEARCH) **S** mode to let the Zenith electronic tuner seek out and lock onto the channel.

2. Some MATV systems may shift channels to frequencies generally used only by cable TV systems. You may switch to the *catv* **C** mode to see if you find channels with "teen" channel numbers (14, 15, 16, etc.) that were not tuned in the *b'cast* **B** mode. If so, some cable frequencies are being used and you

probably will get the best tuning in the *catv* **C** mode.

C) Cable TV.

Cable Television Systems often use frequencies not used by normal over-the-air broadcasters. These channels are not tunable in the normal broadcast mode (even though the channel numbers may correspond to broadcast channel numbers).

To determine which set of frequencies is used by your Cable company, two methods are provided here. You may use either Method 1 – which is a simplified frequency determination test, or Method 2 – which is a more detailed procedure for frequency determination:

METHOD 1 – Simplified Determination Procedure.

- a. Set AFC switch in **F** (FIXED) position.
- b. Select a channel on which the Cable company is known to be broadcasting.
- c. Set the Band Selector switch in *catv* **C** position. Note TV picture quality.
- d. Set the Band Selector switch in *hrc* **H** position. Note TV picture quality.
- e. Set the Band Selector switch in *icc* **I** position; again note TV picture quality.
- f. Leave the Band Selector switch in whichever position gives you the "best" Cable TV picture.

NOTE:

Under certain conditions (like using two different Cable companies), getting the "best" picture may require two different Band Selector switch settings. In this event, change the AFC switch setting to **S** (SEARCH) mode. This should produce an excellent picture without the need to change the Band Selector switch setting.

METHOD 2 – Detailed Determination Procedure.

(See accompanying chart.)

To maximize the number of non-scrambled cable channels that your TV can tune, start first with the Band Selector switch in *catv* **C** mode. Set the AFC switch to **F** (FIXED),

then select a test channel (2, 3, or 4) that you know you should be able to receive. If your TV does not get picture and sound on that channel, then set the Band Selector switch to *hrc* **h** mode and select any other channel. Then, once again, select the test channel you tuned earlier. If the channel tunes in better in *hrc* **h** mode, then leave it in *hrc* **h** mode. If the channel tunes in better in the *catv* **c** mode, then switch back to the *catv* **c** mode and perform the following test for the ICC band:

To determine if the Band Selector should be in the CATV or ICC mode, set the Band Selector switch to *catv* **c** mode and the AFC switch in **F** (FIXED) mode. Select a test channel (5 or 6) that your Cable company lists as active. If your TV gets no pic-

ture or sound on that channel, set the Band Selector switch to *icc* **i** mode and select any other channel. Then, once again, select the test channel you tuned earlier. If the channel tunes in better in *icc* **i** mode, then leave the switch in the *icc* **i** mode. If the channel tunes in better in the *catv* **c** mode, then switch back to the *catv* **c** mode.

If some channels are poorly tuned or missing when the AFC switch is in **F** (FIXED) position, select the AFC **S** (SEARCH) position. Generally, this will not significantly slow down tuning. It will ensure the best tuning a) should your Cable TV or MATV system shift frequencies slightly, or b) should you change your input source to, for example, VCR or computer, or back to broadcast TV from MATV or Cable TV.

RECOMMENDED BAND/AFC SETTINGS Selecting The Best Band/AFC Settings For Each Signal Source

IF YOUR SIGNAL SOURCE IS:	TRY:		IF THE RESULT IS:	YOU SHOULD:
	BAND	AFC		
OVER-THE-AIR (YOUR ANTENNA)	b	F	ACCURATE TUNING*	(LEAVE AS IS)
OVER-THE-AIR (MASTER ANTENNA)	b	F	POOR PICTURE, OR NO PICTURE/SOUND	SET AFC TO S
	c	F	MORE CHANNELS THAN b/F BUT STILL POOR	SET AFC TO S
			FEWER CHANNELS THAN WITH b/F	SET TO b/S
			SAME CHANNELS BUT POOR PICTURE	SET TO c/S OR b/S
CABLE SYSTEM	c	F	NO PICTURE, OR POOR PICTURE OR SOUND	SET TO I/F**
	i	F	BETTER PICTURE OR MORE CHANNELS THAN WITH c/F (SPCL. CHANNEL 5 & 6)	USE I
			POORER PICTURE OR FEWER CHANNELS	SET TO h/F
	h	F	BETTER PICTURES OR MORE CHANNELS THAN WITH c/F OR I/F	SET TO S IF CHANNELS TUNE POORLY, LACK COLOR.
VIDEO GAMES, ETC.	b	S	ACCURATE TUNING***	LEAVE IN SAME POSITION AS YOUR REGULAR SIGNAL SOURCE

*If problems exist, check the trouble shooting chart entitled, "Before Calling For Service."

**If results are still not satisfactory, repeat with S setting.

***If problems exist, check connection to receiver.

GETTING THE "BEST" COLOR PICTURE

Your Color TV has been carefully adjusted for a good color picture at the factory. But where you live, even where you place the TV in your home, can affect your color picture. So you may wish to make a few simple adjustments through the individual picture

controls. This is not difficult to do. In fact, you can do it as well as anybody, because only you can decide what picture is "best" for you. The individual adjustment controls and their functions are described in the following paragraphs.

TV PICTURE ADJUSTMENTS – INDIVIDUAL CONTROLS

Individual Controls and Their Operation

PICTURE – this control lets you adjust picture level. It does this by adjusting contrast and color level at the same time and in the proper balance.

BLACK LEVEL – this control lets you adjust the black areas in the picture to the level you want. Once set, the *Contrast Regulator* (an electronic circuit), automatically maintains the black level from scene to scene, and channel to channel. After the BLACK LEVEL control is set, further brightness adjustments should be made with the PICTURE control.

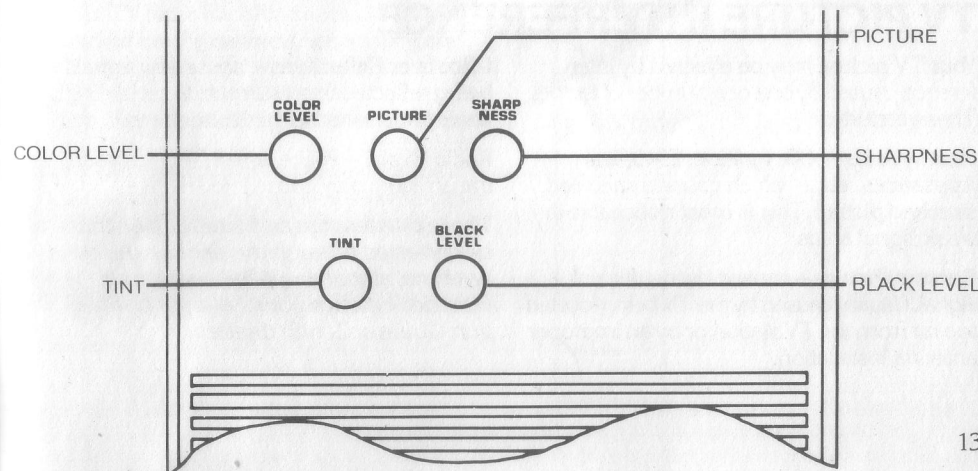
COLOR LEVEL – this control sets the intensity of the colors. If turned too far to the left, colors appear faded and weak. If turned too far to the right, colors appear vivid or intense.

TINT – adjust this control for the most natural flesh tones. If turned too far to the left, flesh tones will appear purple; if turned too far to the right, they will appear green.

SHARPNESS – this control lets you get a softer picture by turning the control to the left. It lets you get a sharper picture by turning the control to the right.

INDIVIDUAL CONTROLS

OPEN CONTROL PANEL DOOR FOR ACCESS TO CONTROLS



CARING FOR YOUR TV

Your TV will look better, have a longer life and perform better if you care for it properly. Here is how:

Picture Glass Cleaning — The picture tube face attracts dust particles and should be cleaned regularly. To clean the face, first turn the TV off. Next, spray a small amount of glass cleaner *on a cleaning cloth*, wipe glass face until clean. Repeat if necessary.

To delay new dust accumulation, wet a soft cloth in lukewarm water in which a little fabric softener or dishwashing detergent has been mixed. Wring the cloth almost dry. Wipe the glass face. Make sure no drops of moisture are squeezed onto the glass. *Do not wipe the glass dry.* Allow the glass to air-dry before you turn the TV on again.

Cabinet Care — Check to see that the TV is off. To clean:

- Non-Wood Cabinets or Cabinet Components.

Moisten a soft cloth with a mild soap solution or a dishwashing detergent. Wipe the surface with a damp cloth. Then rinse the cloth in clean water and wipe the surface again. Allow the TV to air-dry before turning it on.

- Wood Cabinets or Cabinet Components.

Use any good furniture cleaner and polish. Regular care will help preserve the finish.

WHEN ON VACATION

Before going on vacation you may want to unplug the power cord from the electrical wall outlet. This will protect the TV from possible damage from lightning or power

line surges. If you have an outdoor antenna, you may also want to disconnect the antenna lead-in wires on the back of the TV.

TV PICTURE INTERFERENCE

Your TV picture may be affected by interference caused by one or a number of factors. These include:

Nearby Automobile Ignition, Electrical Appliances, etc. — which cause a speckled, streaked picture. This is most noticeable in weak signal areas.

Snow in Picture — caused by insufficient signal. Usually caused by the TV being located too far from the TV station or by an improper antenna installation.

Ghosts or Reflections — caused by signals being reflected from surrounding buildings, water tanks, or other high structures.

Radio Signal — Police, amateur or CB radio transmitters may cause interference.

These interference problems can often be corrected through the use of a better antenna, signal amplifiers, or various filter devices. See your Antenna Connection Guide or Zenith dealer.

BEFORE CALLING FOR SERVICE

Always request that your technician use only genuine Zenith exact replacement parts for continued Quality and Safety performance.

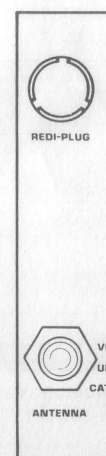
Keep your Zenith ALL Zenith.

CHECK THESE ITEMS:

	Check AFC and BAND SELECTOR switch settings	Re-orient antenna	Adjust color controls	Is it a color program?	Is TV power switch ON?	Check for local interference	Adjust PICTURE control	Adjust BLACK LEVEL Control	Is TV plugged in? Power in outlet?	Is antenna connected? broken wires	If outside antenna check for station trouble	Try other Channel If OK possible	Remote Control Battery dead?
Picture OK. Sound poor		●			●							●	
Sound OK. Picture poor		●			●	●	●		●	●	●		
No picture or sound	●			●				●	●	●	●		
Picture blurred		●									●	●	
Ghosts in picture		●							●	●	●		
Streaks or lines in picture		●			●					●	●		
Weak picture		●				●			●	●	●		
Bars on screen		●			●					●			
Poor color		●	●		●	●	●		●	●	●		
No color		●	●	●					●	●	●		
Picture distorted		●									●	●	
Poor reception, some channels		●			●						●	●	
Picture OK, no sound												●	
Remote Control does not work													●

ZENITH REDI-PLUG

Your TV has a Redi-Plug access port on the back of the TV cabinet (See accompanying illustration). It is protected by a plastic shield. This access port will allow installation of a connector for such products as a Stereo Adaptor, Teletext decoder or certain cable TV decoders. When you have need for it, your qualified Zenith service representative can install the required accessory at additional cost.



REGISTRATION CARD LOST OR MISPLACED?

The Owner Registration Card furnished with your Zenith Color TV is pre-printed with the Model and Serial numbers of your new TV. Please fill out the card and mail it at your earliest convenience. It is imperative that Zenith know how to reach you promptly if we discover a safety problem that would affect you. If the pre-printed card has been lost or misplaced, you may use the card printed in this Operating Guide. Either card will qualify you for the free TV drawing, but you are limited to only one entry in the drawing. Complete the card, place it in an envelope and mail it to:

Zenith Electronics Corporation
P.O. Box 17969
Denver, CO 80217-0969

Free TV drawing offer is void in Canada and other countries where restricted or prohibited by law. The odds of winning depend upon the number of participants. This offer expires December 31, 1988.

Use this substitute Owner's Registration Card only if the original pre-printed Owner's Registration Card has been misplaced or lost.

Zenith Owner Registration Card

Please Print Clearly or Type

1. ☐ Mr. 2. ☐ Mrs. 3. ☐ Ms. 4. ☐ Miss

Area Code Telephone

86H

First Name Initial Last Name

Street Apt. No.

City Date of Purchase

State Zip Mo. Day Yr.

Dealer/Store Name

Dealer/Store Street Address

City

State Zip Code

Please record the model number and serial number from the sticker on the back of the TV

MODEL

DISTRIBUTOR

SE1911W

St 822-15240288

YOUR ZENITH WARRANTY

Consumer Protection Plan for Zenith Color Television

Welcome into the Zenith family! We believe that you will be pleased with your new Zenith Color TV. Please read this Consumer Protection Plan carefully. It is a "**LIMITED WARRANTY**" as defined under Federal law. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state within the U.S.A.

Zenith's Responsibility

Service Labor – For a period of 90 days from effective warranty date Zenith will pay for service labor by a U.S., or Canadian, distributor-approved Zenith service center when needed as a result of manufacturing defects.

Parts – New or rebuilt replacements for factory-defective parts will be supplied for one year from effective warranty date (color picture tube – two years). Replacement parts are warranted for the remaining portion of the original warranty period.

Home Service – Warranty service for 19" diagonal (U.S.A.) or larger screen size models is provided in the home.

Not Covered – Installation, adjustment of customer controls in the home and installation or repair of home antenna systems, cable converters or cable company-supplied equipment are not covered by this warranty; nor is damage due to misuse, abuse or negligence. Any alteration of the product after manufacture voids this warranty in its entirety.

Owner's Responsibility

Note: Before you ask for Warranty service, check the Operating Guide section entitled, "BEFORE CALLING FOR SERVICE." It may be possible to avoid a service call.

Effective Warranty Date – Warranty begins on the date of original consumer installation. For your convenience, keep the dealer's dated bill or sale or delivery ticket as evidence of the purchase date.

Operating Guide – Read your Operating Guide carefully so that you will understand the operation of your set and how to adjust the customer controls.

Carry-In Service – Models smaller than 19" diagonal (U.S.A.) or smaller screen size must be taken to a distributor-approved Zenith service center for warranty service and must be picked up by the owner.

Antenna – Reception problems caused by inadequate home antennas or faulty antenna connections are the owner's responsibility.

Important: Owner Registration – Please fill out and mail your Owner Registration Card. It is imperative that Zenith know how to reach you promptly if we should discover a safety problem that could affect you.

Warranty Service – For warranty service information, contact your Zenith dealer preferably, or any distributor-approved Zenith service center. Parts and service labor that are Zenith's responsibility (see above) will be provided without charge. Other service is at the owner's expense. If you have any problem in obtaining satisfactory warranty service, write or call Customer Service, Zenith Electronics Corporation, 11000 Seymour Avenue, Franklin Park, IL 60131 (312)-671-7550.